Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(Currently amended)** An ink jet recording medium comprising a support having thereon a porous layer having a capacity of 15 to 40 ml/m^2 and containing micro particles of ground silica and a cross-linked hydrophilic binder which is cross-linked with ionizing radiation, wherein the micro particles of ground silica have an average particle diameter of secondary particles of 10 - 300 nm and a weight ratio of the micro particles of ground silica to the hydrophilic binder in the porous layer is from 2.5:1 to 20:1, and wherein the crosslink of the crosslinked hydrophilic binder compound is formed by irradiating ionizing radiation to a hydrophilic polymer compound which has the side chains constituted by a modifying group selected from the groups of photo-dimerizable type, photo-decomposable type, photo-polymerizable type, photo-modifying type and photo-dimerizable type

2. **(Original)** The ink jet recording medium of claim 1, wherein the micro particles of ground silica have an average particle diameter of primary particles of 3 - 50 nm.

3. **(Original)** The inkjet recording medium of claim 1, wherein said micro particles of ground silica is synthesized with a gel method.

4. **(Original)** The inkjet recording medium of claim 2, wherein said micro particles of ground silica is synthesized with a gel method.

5. **(Currently amended)** An ink jet recording medium comprising a support having thereon a porous layer having a capacity of 15 to 40 ml/m^2 and containing micro particles of ground silica and a cross-linked hydrophilic binder which is cross-linked with ionizing radiation.

wherein a specific surface area measured with BET method of the micro particles of silica is 40 - 100 m^2/g, [[and]] a coefficient of variation in a primary particle distribution of

the micro particles of silica is not more than 0.4 and a weight ratio of the micro particles of ground silica to the hydrophilic binder in the porous layer is from 2.5:1 to 20:1, and wherein the crosslink of the crosslinked hydrophilic binder compound is formed by irradiating ionizing radiation to a hydrophilic polymer compound which has the side chains constituted by a modifying group selected from the groups of photo-dimerizable type, photo-decomposable type, photo-polymerizable type, photo-modifying type and photo-dimerizable type.

6. **(Currently amended)** An ink jet recording medium comprising a support having thereon a porous layer having a capacity of 15 to 40 ml/m^2 and containing micro particles of ground silica and a cross-linked hydrophilic binder ~~being~~ which is cross-linked with ionizing radiation,

wherein the micro particles of silica are gas phase method, and a ratio of isolated silanol groups of the micro particles of silica is 0.5-2.0 and a weight ratio of the micro particles of ground silica to the hydrophilic binder in the porous layer is from 2.5: 1 to 20:1, and wherein the crosslink of the crosslinked

hydrophilic binder compound is formed by irradiating ionizing radiation to a hydrophilic polymer compound which has the side chains constituted by a modifying group selected from the groups of photo-dimerizable type, photo-decomposable type, photo-polymerizable type, photo-modifying type and photo-dimerizable type.

7. **(Original)** The ink jet recording medium of claim 6, wherein an average particle diameter of primary particles of said gas phase method silica is 5 - 50 nm, and a ratio of isolated silanol groups of the micro particles of silica is 0.5 - 1.5.

8. **(Original)** The ink jet recording medium of claim 1, wherein the hydrophilic binder comprises a polymer which is cross-linked by exposing ionizing radiation to a hydrophilic polymer of a degree of polymerization of at least 500, and a main-chain of the hydrophilic polymer having a plurality of side-chains.

9. **(Original)** The ink jet recording medium of claim 5, wherein the hydrophilic binder comprises a polymer which is cross-linked by exposing ionizing radiation to a hydrophilic polymer of a degree of polymerization of at least 500, and a main-chain of the

hydrophilic polymer having a plurality of side-chains.

10. **(Original)** The ink jet recording medium of claim 6, wherein the hydrophilic binder comprises a polymer which is cross-linked by exposing ionizing radiation to a hydrophilic polymer of a degree of polymerization of at least 500, and a main-chain of the hydrophilic polymer having a plurality of side-chains.

11. **(Original)** The ink jet recording medium of claim 8, wherein the hydrophilic polymer is an modified polyvinyl alcohol which is capable of cross-linking by ultraviolet ray, and a modification ratio of the side-chain to the main-chain is 0.01 - 4 mol%.

12. **(Original)** The ink jet recording medium of claim 9, wherein the hydrophilic polymer is an modified polyvinyl alcohol which is capable of cross-linking by ultraviolet ray, and a modification ratio of the side-chain to the main-chain is 0.01 - 4 mol%.

13. **(Original)** The ink jet recording medium of claim 10, wherein the hydrophilic polymer is an modified polyvinyl alcohol which is capable of cross-linking by ultraviolet ray, and a modification

ratio of the side-chain to the main-chain is 0.01 - 4 mol%.

14. **(Original)** The ink jet recording medium of claim 1, wherein the support is a non water-absorptive support.

15. **(Original)** The ink jet recording medium of claim 5, wherein the support is a non water-absorptive support.

16. **(Original)** The ink jet recording medium of claim 6, wherein the support is a non water-absorptive support.

17. **(Currently amended)** A method for preparing the ink jet recording medium of claim 1, comprising the steps of:

coating on the support [[an]] a coating composition so as to form a porous layer containing inorganic micro particles and a hydrophilic binder which is capable of cross-linking by ultraviolet ray;

exposing ultraviolet ray to the porous layer by employing a metal halide lamp which has primary emission wavelength of 300 - 400 nm; and

drying the porous layer,

wherein the ultraviolet ray has an irradiation energy at a wavelength of 350 nm of 1 - 100 mJ/cm^2.

18. **(Currently amended)** A method for preparing the ink jet recording medium of claim 5, comprising the steps of:

coating on the support [[an]] a coating composition so as to form a porous layer containing inorganic micro particles and a hydrophilic binder which is capable of cross-linking by ultraviolet ray;

exposing ultraviolet ray to the porous layer by employing a metal halide lamp which has primary emission wavelength of 300 - 400 nm; and

drying the porous layer,

wherein the ultraviolet ray has an irradiation energy at a wavelength of 350 nm of 1 - 100 mJ/cm^2.

19. **(Currently amended)** A method for preparing the ink jet recording medium of claim 6, comprising the steps of:

coating on the support [[an]] a coating composition so as to form a porous layer containing inorganic micro particles and a hydrophilic binder which is capable of cross-linking by ultraviolet ray;

exposing ultraviolet ray to the porous layer by employing a metal halide lamp which has primary emission wavelength of 300 - 400 nm; and

drying the porous layer,

wherein the ultraviolet ray has an irradiation energy at a wavelength of 350 nm of 1 - 100 mJ/cm^2.

Claim 20 (Canceled).

21. **(Previously presented)** The ink jet recording medium of claim 1, wherein a weight ratio of the micro particles of ground silica to the hydrophilic binder in the porous layer is from 5:1 to 15:1.